



EXECUTIVE ORDER S-21-06 IMPLEMENTATION PLAN

Twenty-First Century Government: Expanding Broadband Access and Usage in California

This implementation plan for Executive Order S-21-06 provides further information on the Administration's new broadband initiatives. This plan identifies specific rationale behind various Executive Order action items and details how these items will be implemented in a timely and effective fashion.

1. CREATION OF THE CALIFORNIA BROADBAND TASK FORCE

The California Broadband Task Force will bring together public and private sector stakeholders to further broadband access and usage in California.

A. MEMBERSHIP

Within thirty days of the date of this Executive Order, the Office of the Governor will name an odd number of members, no less than eleven and no more than nineteen, to the California Broadband Task Force. These members will include, but are not limited to, senior representatives from government entities having a role in infrastructure deployment, information technology, and economic development; representatives from California's private sector technology and investment industries; and representatives of non-profit organizations.

Two of the California Broadband Task Force members will serve as co-chairs for the Task Force. One of these two co-chairs will be the Secretary of the Business, Transportation and Housing Agency (BTH); the other will be selected by the Office of the Governor.

The California Broadband Task Force may create working groups consisting of Task Force members and/or supporting staff. Working groups may report findings and recommendations to the California Broadband Task Force. Ultimate decision making, however, rests with appointed members of the California Broadband Task Force.

B. TASKS

The California Broadband Task Force will identify barriers to broadband access and opportunities for increased broadband adoption. It will draft two reports that address these access and usage issues. Within ninety days of the date of this Executive Order, the California Broadband Task Force shall provide a preliminary report to the Office of the Governor that identifies specific administrative actions that can result in immediate promotion of broadband access and usage. The California Broadband Task Force then shall produce a more comprehensive report that builds upon these initial recommendations. The comprehensive report is due to Office of the Governor and Legislature within one year of the date of this Executive Order.



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The California Broadband Task Force reports will focus on strategies that can be pursued at an administrative level and will either reduce bottlenecks or build upon “best practices.” The comprehensive report, at a minimum, shall include the following:

- Identification of government-imposed barriers or obstacles to increased broadband access and usage
- Suggestions for how to remove these barriers or obstacles and any new measures that should be adopted in their place
- Technology-neutral recommendations for how to achieve statewide ubiquitous broadband coverage
- Metrics for evaluating private and public sector efforts to advance broadband access and usage
- Targets for region-by-region annual increases in availability and adoption rates for broadband and advanced telecommunication services
- Identification of regionally based business models that will lead to an increase in the use of affordable broadband (including increased use in underserved areas and low use populations)
- Assessment of how the State can facilitate lessons learned among regions
- Identification of areas where community-level, regional-level, and state-level stakeholders may aggregate demand for broadband and create opportunities for better business models that result in increased adoption rates
- Evaluation of value-added applications for urban-based and rural-based stakeholders (e.g., educational and civic engagement applications)
- Analysis of how State Agencies, local governments, and non-profit organizations can best integrate their efforts and thereby attract more private investment to accelerate broadband deployment and increase broadband usage
- Recommendations for how the State can better leverage federal, State, and private foundation grant and loan programs relating to broadband

2. DESIGNATION OF BTH AS THE LEAD AGENCY

BTH is ideally suited to lead State broadband initiatives. All three aspects of its core infrastructure responsibilities – business, transportation, and housing – are central to further access and usage of broadband technologies. As the infrastructure agency, BTH personnel have devoted significant time and resources to furthering broadband deployment and access in the State. BTH staff has been responsible for the design and implementation of a variety of broadband initiatives,¹ and BTH has demonstrated the

¹ These broadband initiatives include the following:

- The Next Generation Internet Program: This Program initiated two Next Generation Internet Centers located at University of California, Berkeley and at University of California, San



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capacity to lead complex partnerships composed of private and public sector stakeholders.² Finally, BTH has special insight into the impact of State broadband initiatives, because it is the largest State supplier and user of broadband.³

BTH, however, cannot implement the Executive Order directives on its own. State Agencies will need to coordinate many of their policies and practices that affect broadband access and usage. Thus, a Cabinet working group will be established to assist BTH in implementation of broadband initiatives launched by the Executive Order. Participating State Agencies shall include, but are not limited to, BTH; the California Department of Corrections and Rehabilitation; the California Department of Food and Agriculture; the California Health and Human Services Agency; the Resources Agency; the State and Consumer Services Agency; and the Department of Finance.

Within two weeks of the date of this Executive Order, each State Agency shall appoint an executive-level staff member to serve on the working group. The State Agency liaison will need to be approved by both the BTH Secretary and his or her Agency Secretary. Liaisons will brief their respective Agency Secretaries on the status of State broadband initiatives, but the liaisons ultimately will defer to BTH leadership on the implementation of the Executive Order.

State Agency liaisons on the Working Group will actively support interagency broadband efforts. Liaisons will inform interagency decision making by gathering broadband-related material from entities under their Agencies. Pursuant to BTH guidance, State Agency liaisons also will have the authority to dictate policies and

Diego. The Program also funded the "One Gigabit or Bust" study, which focused on how to ensure that all Californians have access to one-gigabit broadband by 2010.

- The eHealth Initiative: BTH is helping develop a broadband network that will give rural communities the bandwidth necessary to participate in a wide range of telemedicine activities.
- The Rural E-Commerce Program: This Program launched twenty-four broadband demonstration projects spread across thirty-nine counties.

Participation in these and other broadband programs has informed BTH staff of challenges and opportunities for improving access to, adoption of, and innovative applications for ubiquitous broadband.

² With respect to broadband specifically, BTH has led meetings with institutional stakeholders to elicit their partnership and to ask them to determine the value that they can bring to their respective regions. These stakeholders include, among others, TechNet, public foundations in California, the Great Valley Center, and the Presidents and Chancellor's Office of the California State University.

³ BTH's broadband network is far larger than any other State entity: BTH, through the California Department of Transportation (Caltrans), manages a significant majority of all State rights-of-way (ROW), including 15,000 linear miles of State roadways. Furthermore, BTH uses broadband more than any other State entity. Its departments use broadband to operate Caltrans/California Highway Patrol (CHP) Traffic Management Centers, DMV field offices, Caltrans's twelve regional districts, CHP stations throughout the State's highways, and connections between departments' field locations.



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practices relating to broadband within their respective Agencies, and they will act on behalf of their Agency secretaries. Liaisons will have the right to review all Cabinet working group materials prior to their public release.

3. STATE ROW ACCESS AND USAGE

The Executive Order adopts ROW reforms to facilitate further construction of broadband networks. Broadband providers must get permission from the State when placing high-speed facilities in State ROW, and time and costs associated with obtaining this permission can significantly affect prospects for broadband deployment.

A. DATABASE THAT ENCOURAGES COLLABORATIVE ROW PROJECTS

BTH will establish and maintain a publicly accessible database that will serve as an important two-way communications link among public and private stakeholders interested in broadband deployment. The Web-based database will allow government entities to announce whether a public works project can accommodate broadband deployment, and it will permit private companies to express interest in access to specific ROW. Stakeholders using the database will include private broadband companies and federal, State, and local agencies.

Development of this database will require layering information on multiple government entities' infrastructure build processes. Caltrans will begin development of the database design process by creating a pilot system, which will focus on Caltrans builds. Stakeholders will be given an opportunity to provide input on the design of the pilot system. BTH then will establish a statewide database, which will be used for coordinating builds launched by all State Agencies.

The statewide database will have the capacity to produce significant benefits. Bringing parties together through the database will help improve public and private sector partnerships. The database will enable cost-efficient coordination among broadband providers, which typically do not share build data with each other. When multiple companies lay fiber on the same route at the same time, costs are reduced for each significantly, and the public has to endure fewer road closures. Moreover, even if a build is not shared among broadband providers, allowing just one provider to install its broadband infrastructure as a part of existing State Agency construction or repair can yield significant economic efficiencies. Company costs are reduced if a firm deploys its broadband networks at the same time a government entity already has crews undertaking construction in public ROW.

State Agencies will explore ways in which to encourage efficient uses of the database. To ensure that the database is used to its fullest capacity, State Agencies will conduct outreach to encourage parties interested in broadband deployment to take advantage of the database. Notice will be provided to stakeholders prior to launch of the database. State Agencies may further compel broadband providers to work together by prioritizing permit processing for joint builds ahead of normal single company projects.



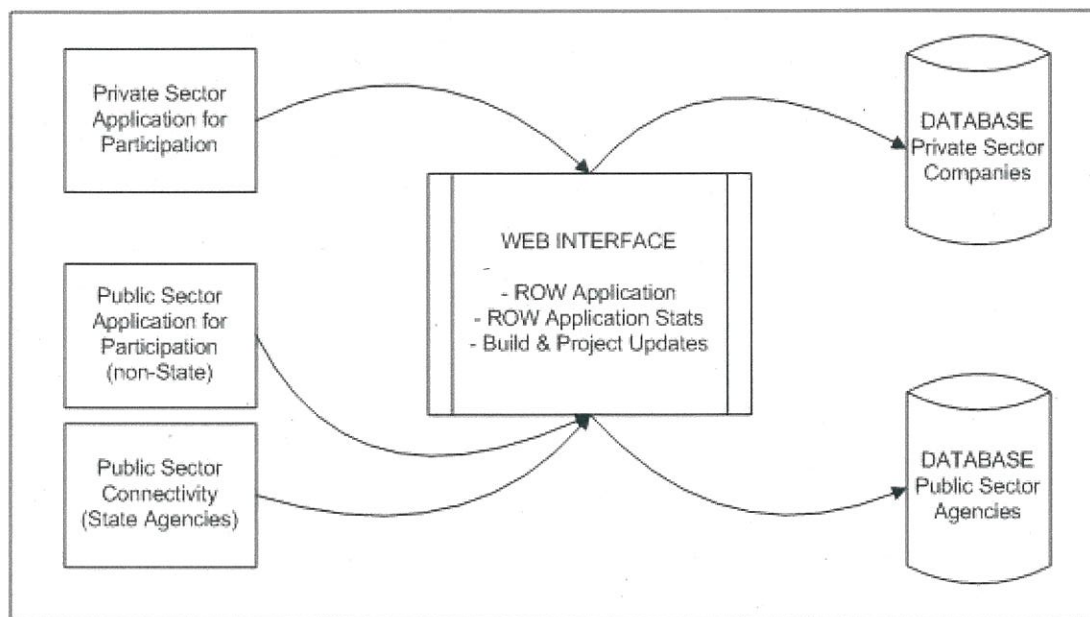
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Also BTH will create new ways of using the database through experience and expertise gained from major construction projects, such as those contemplated by the Governor's infrastructure bond. The Governor's infrastructure bond may be used to build or repair more than 10,000 miles of lanes, much of which could provide inexpensive access to conduit for broadband facilities during construction.

i. DESIGN OF THE CALTRANS PILOT SYSTEM

Both public and private entities will be able to use the Caltrans database. Private parties using the database will have to complete an application form and be pre-approved for permitting by the Caltrans Right-of-Way Division (Caltrans ROW), which will speed up the permitting process when deployment is prudent. Public sector entities will need to complete a Caltrans application form before using the database.

Figure 1 – Infrastructure design for the Caltrans pilot system.



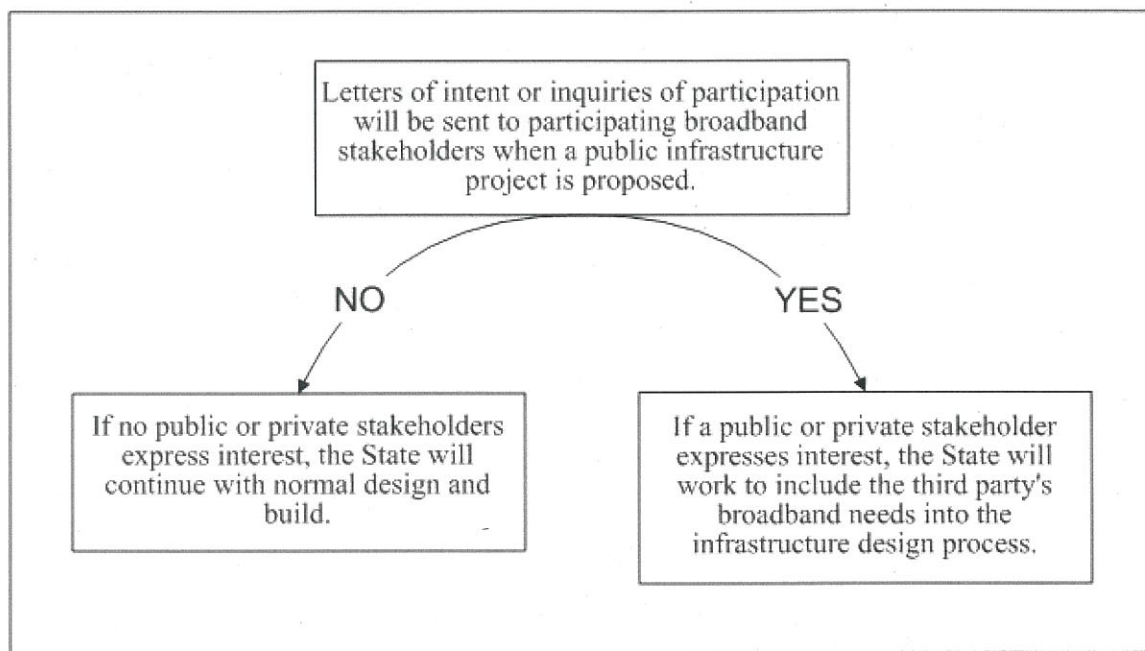
The Caltrans pilot system will enable two-way communication regarding upcoming construction projects in California. Database communications and maintenance will be managed by the Caltrans Information Technology Division (Caltrans IT), which will serve as the liaison between participating parties and Caltrans. Caltrans IT will provide participating parties advance notice of Caltrans construction projects. During proposed infrastructure build outs, Caltrans will use the database to send out letters of intent or inquiries of participation, with specified expiration dates. Also Caltrans IT will communicate with private companies or municipalities that inquire about builds Caltrans will or might initiate in the future.



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If a private company or municipality demonstrates interest in an upcoming project, Caltrans will try to implement the third party's broadband needs into the infrastructure design process, while Caltrans ROW processes applicable permits. Caltrans will continue with normal design and build if no private firms or municipalities express interest in a given project.

Figure 2 - Process used by the Caltrans pilot project.



ii. ESTABLISHMENT OF THE STATEWIDE DATABASE

Once the Caltrans pilot project has been established and validated by participating parties, BTH will launch a statewide database. The database will be used for planning all builds within the State. It will provide information on ROW access – along with associated geographic information systems (GIS) and scheduling information – and will enable requests for ROW usage. The database also will serve as a repository for information on existing and developing broadband networks in California. This information will include contacts for broadband providers and local government officials; maps of current broadband infrastructure; and maps of current and future builds. Knowledge of the current state of broadband coverage will allow stakeholders to engage in more directed strategic planning for future network development, especially in areas that have no or insufficient broadband access.

All State Agencies will be able to use the database for planning their respective construction projects. They will utilize the database to manage private sector applications and pre-approvals for permits to use a particular ROW. State Agencies also



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will be able to use the database to send broadband stakeholders letters of intent or inquiries of participation, with specified expiration dates. If a private company or municipality expresses interest, the holder of the ROW will work to include the third party's broadband needs into the infrastructure design process.

B. STATE CHARGES FOR ROW USAGE

Caltrans will change its ROW compensation rate structure for wired broadband installations so that it only reflects costs.⁴ This policy reform will be accomplished either through a cost-based rate schedule or cost recovery scheme (no net revenues).

Limiting ROW access fees to the amount needed to recover State costs will reduce barriers to deployment and thereby encourage increased access to broadband. This revised practice recognizes that it is California State policy to "assist in bridging the 'digital divide' by encouraging expanded access to state-of-the-art technologies for rural, inner-city, low-income, and disabled Californians."⁵ Also it aligns State fees with local ROW access fees, which are statutorily limited to reasonable cost recovery.⁶

i. POLICY IMPLEMENTATION

Caltrans shall begin immediate redesign of its policy for ROW access charges. It will develop its new policy in consultation with the California Transportation Commission (CTC) and BTH, and it will present its revised policy to the Office of the Governor within sixty days of the date of this Executive Order.

After the Office of the Governor reviews its proposal, Caltrans will seek formal CTC approval of its revised ROW access fee policy. All leases with private entities for use of State highway ROW have to be approved by the CTC.⁷

The revised ROW policy shall be enacted in regulations adopted after CTC approval. Once the new policy is in effect, Caltrans will issue the regulations and related manuals to all affected divisions and programs.

⁴ Previously Caltrans required all broadband providers to pay above-cost fees for use of State ROW. Reform of this policy is limited to *wired* broadband installations to avoid conflicts with federal policy and challenges to Caltrans airspace leases.

⁵ CAL. PUB. UTIL. CODE § 709(d).

⁶ See Gov. Code § 50030 ("Any permit fee imposed by a city, including a chartered city, a county, or a city and county, for the placement, installation, repair, or upgrading of telecommunications facilities such as lines, poles, or antennas by a telephone corporation that has obtained all required authorizations to provide telecommunications services from the Public Utilities Commission and the Federal Communications Commission, shall not exceed the reasonable costs of providing the service for which the fee is charged and shall not be levied for general revenue purposes.").

⁷ CAL. STS. & HIGH. CODE § 104.12.



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While the new ROW policy is being developed, the State shall suspend collection of ROW fees imposed upon wired broadband providers. This measure guarantees that there will be no undue delay in installation of further wired broadband facilities.

ii. MEASURES TO PROTECT THE PUBLIC

Caltrans will place limits on ROW use to guarantee the safety of freeway motorists and to continue to protect taxpayer investment. These measures include the following:

- Pursuant to Streets and Highways Code § 671.1, Caltrans charges enough to cover its direct costs, which include plan review and on-site inspections. Caltrans also is not and should not be responsible for any costs of construction or installation by any company.
- Companies placing broadband equipment within ROW should bear all costs and any risk associated with design, installation, repair, relocation, modification, or removal of their broadband facilities. State operations should always take precedence over the operation and needs of the permittee.
- All installations are subject to special conditions to ensure the safety of motorists, as well as to avoid traffic problems. These same conditions should continue to apply. For example, physical access to broadband facilities for construction or maintenance purposes may be limited to non-peak periods or evenings, and access points should be located outside the ROW.

C. STREAMLINED ROW PERMITTING

Within 120 days of the date of this Executive Order, State Agencies, under the direction of BTH, will adopt a single application for broadband providers seeking ROW use. This application will employ standard criteria and require that decisions be made within an established time period. An encroachment permit is required for placement of telecommunications facilities in all cases.

By facilitating access to State ROW, a standard application will reduce barriers to broadband deployment and may encourage use of new broadband technologies. A standardized approach will allow for State Agencies to improve their individual and overall efficiencies in processing ROW permits. These positive results can be achieved without significant government expenditure.

Currently the ROW permitting process is not coordinated among Agencies. It may take multiple months for a State Agency to issue a permit, and lack of coordination among State Agencies can result in further delays for broadband projects that use more than one ROW.



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D. INTERAGENCY GUIDE FOR ROW DISPUTE RESOLUTION

State Agencies, under the direction of BTH, will adopt a ROW dispute resolution guide that can be used if a dispute arises between a broadband provider and an Agency. State Agencies will design the best practices guide within 180 days of the date of this Executive Order, and Agencies will be in compliance with the guide within 180 days of its creation. The dispute resolution process will be redesigned in a manner that promotes broadband access, adoption, and applications. Quicker resolution to disputes will allow new broadband technologies to reach Californians faster.

One approach the State may take in its best practices guide is to delegate dispute resolution to committees specializing in broadband deployment issues. This measure could significantly decrease the amount of time required to resolve broadband disputes.

Current practices – which vary from Agency to Agency – can be very time consuming. For example, a Caltrans permitting dispute may drag on for 180 days. Caltrans requires its Director to be involved in ROW dispute resolution. This requirement necessarily inserts delay into dispute resolution, as the Director also is responsible for an annual operating budget of more than \$9 billion, 22,000 employees, and \$7 billion worth of transportation improvements under construction.

4. ACCESS TO STATE ASSETS FOR WIRELESS BROADBAND DEPLOYMENT

To accelerate deployment of wireless broadband, the Department of General Services (DGS) shall enter into a contract with one or more companies that will place, construct, and maintain wireless broadband equipment on top of select State Agency buildings. State Agencies agreeing to the terms of this contract will avoid time-consuming separate negotiations and will enable faster build out of wireless broadband networks. DGS shall make every effort to execute this contract within 180 days of the date of this Executive Order.

In reviewing proposals for access to State assets, the security of State assets and the preservation of environmental resources will be considered. Installation and maintenance of equipment must be reasonable and environmentally sound.

The State currently has no practice in place for the organized, accelerated deployment of wireless broadband from State buildings. DGS, however, leases State-owned building space (e.g., roof tops) for communication devices of public and private entities. This lease fee is limited to the amount needed to recover State costs.

5. STATE USAGE OF ADVANCED TELECOMMUNICATION SERVICES

California State government shall lead by example in its use of broadband and advanced telecommunication services. By using and offering advanced broadband applications, the State will promote greater deployment of broadband networks, and will drive up demand for advanced telecommunication services. State usage of modern technologies also has the benefit of making State services more accessible and efficient.



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A. MAPPING OF STATE RESOURCES

The State will be able to better define and implement its broadband goals by using GIS technology. Mapping State resources allows for accurate assessment of region-specific needs and costs of deploying broadband facilities.

Many State assets may serve as a foundation for initiatives to increase broadband access and adoption rates. These assets include, but are not limited to, the following:

- ROW owned by the State
- ROW subject to State regulation (e.g., electrical transmission facilities or railroad lines)
- Broadband infrastructure (e.g., fiber, towers) owned by the State
- Broadband infrastructure leased by the State
- State facilities (owned or leased) that have broadband infrastructure
- State facilities (owned or leased) that do not have broadband infrastructure
- Investment projects relating to broadband

This State information – especially when coupled with private sector data on broadband deployment and usage – can be used to encourage investment in the most cost-effective and benefit-providing broadband projects.

Mapping information by census tracts provides consistency in analyzing the State's broadband infrastructure. This framework provides enough spatial resolution for sub-regional/sub-county planning, but also is general enough to prevent the release of any sensitive information. For illustration, several preliminary maps of State infrastructure by census tract follow below.